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09/892,490	06/28/2001	Robert Everett Parkhill	77666-10/jlo	3152

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EXAMINER

PICH, PONNOREAY

ART UNIT	PAPER NUMBER
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2135

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/892,490

Applicant(s)

PARKHILL ET AL.

Examiner

Ponnoreay Pich

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date 7/2005
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Claims 1-21 have been examined. The examiner notes that in the previous office action, the examiner indicated that claims 3-14 contained allowable subject matter. However, upon further consultation with examiner Ho Song in 2135 and examiner Calvin Hewitt in 3621, the examiner must regretfully withdraw the previous indication of allowable subject matter. Though the teachings by Ward are from the art of parking meters, the business methodology taught by Ward would still be relevant to the art of business cryptography, i.e. selling of public key certificates, and as such one of ordinary skill would have sufficient motivation to combine the teachings of Ward with teachings from the art of business cryptography to arrive at the applicant's claimed invention.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Response to Amendment***

The examiner notes the amendments applicant submitted on 5/12/2005.

### ***Response to Arguments***

Applicant's arguments toward the 112, second paragraph rejection have been considered. Upon further review with examiner Calvin Hewitt and Daniel Greene in art unit 3621, the examiner respectfully submits that applicant's argument that an assertion between a name and a public key (as amended) "is a well known and understood term in security and cryptographic systems" are incorrect. If it is a well-known term, the examiner respectfully request applicant supply proof of what the term means in the art of security and cryptography as applicant's arguments are insufficient evidence.

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Applicant's arguments toward the 101 rejections in the last office action were considered but were not persuasive as nothing tangible was recited in the claims. The examiner notes that the applicant believed that the claims were directed towards the "tangible art of assertion management". The examiner respectfully disagrees as "assertion management" is a concept and is not tangible; you can't touch it. The examiner notes that in the interview with applicant's representative, Mr. Brett, on July 14, 2005 some ways of overcoming the 101 rejections were discussed. Applicant is welcome to amend the claims using the methods discussed or in some other manner to overcome the 101 rejections.

Applicant's arguments with respect to the art rejection of claims 1, 2, 15, and 16 have been considered but are moot in view of the new ground(s) of rejection. However, the examiner will address the applicant's arguments for the sake of clarifying the rejections below as Ward is still used as one of the references in the rejection.

Applicant argues for claims 1 and 15 that the methodology disclosed by Ward does not correspond to a method that maintains a pool of unallocated time as it is not clear that a particular monetary amount corresponds to a fixed amount (or pool) of time. The examiner respectfully disagrees. In Ward's invention, money is equivalent to time as by putting money in the meter, one gains the right to park there legally for a certain amount of time for a given amount of money. Just because the parking rate at a meter might be different at different times or a different parking jurisdictions might have different rates (as argued by applicant) is irrelevant. The fact that Ward's invention can be used by someone at the same parking jurisdiction and at times when the parking fare

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charged are always the same means the claimed limitations read on Ward's teachings. Further, most parking meters charge the same rates no matter the time of day, week, month, or year. Note also that Ward discloses that the smart card of his invention is preferably only useful in the jurisdiction in which it was purchased (p3, last paragraph). It is not unreasonable to assume that within that jurisdiction, the parking rates are constant between each meter. There is also nothing recited in the claims which would indicate that time is limited to always passing at a given constant value. A clock/counter on one computer can run at a different rate than the clock/counter on another computer. This is equivalent to different rates on a parking meter.

Applicant argues for claim 2 that the subject matter that claim 2 is attempting to address is the issue of having "unallocated time" available for use for an indefinite period. Applicant states that the claim recites the concept that over time if "unallocated time" is not used, then the consumer will lose the right to use that "unallocated time." The examiner notes that what the claim is reciting is much broader than what applicant is arguing it is reciting.

As per claim 16, applicant argues that Ward monitors money not time. The examiner respectfully asserts that since money is being used by Ward to buy time, the two are essentially equivalent.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. Claims 1, 3, 7, 8, 11, 13, 14, and 15 use the term "assertion." Neither the specification nor the claims themselves explicitly define what the applicant's definition of assertion is. The examiner notes that the phrase "assertion between a name and a public key" does not clarify further what an assertion is.
2. Any claims not specifically addressed are rejected by virtue of dependency. Appropriate action is required.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-13 and 15-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

#### **Claim 1:**

Claim 1 refers to a method of providing assertion comprising:

1. Selling a pool of unallocated time, which is disclosed in the applicant's specification as handled by a purchase component 18 (p8, lines 15-19).
2. Generating an assertion between a name and a public key upon request, which is disclosed in the applicant's specification as handled by a request

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component 20 and a Certificate Authority (CA) server 28 (p9, lines 5-9 and 26-32).

3. Revoking an assertion upon request, which is disclosed in the applicant's specification as handled by a revocation component 22 (p10, lines 13-16).

The purchase component, request component, and revocation component are disclosed in the applicant's specification as being subroutines within the Certificate Time Manager (CTM) software (page 6, lines 8-12). No tangible subject matter is disclosed by any of these components. In addition, the examiner notes that the CA server may be a software server.

**Claim 2:**

Claim 2 has all the limitations of claim 1. In addition, claim 2 refers to a further step of eroding unallocated time over time. The applicant's specification discloses this step as being handled by the CTM component (p11, lines 30-31). The CTM software is just software, so no tangible subject matter is recited (p6, lines 9-10).

**Claim 3:**

Claim 3 refers to purchase, request, and revocation components. As disclosed in claim 1, these components are software and are not tangible subject matters. In addition, claim 3 also refers to a repository, which the applicant discloses is a public database (page 2, lines 16-18). Databases are just software. No tangible subject matter is recited in claim 3.

**Claim 4:**

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Claim 4 has all the limitations of claims 3. In addition, the examiner notes that certificates are stored in repositories (i.e. databases), which is just software, see p6, lines 22-24. No tangible subject matter is recited.

**Claim 5:**

Claim 5 has all the limitations of claim 3. In addition, claim 5 refers to monitoring when the unallocated time falls below a threshold and notifying a user associated with the unallocated time if the unallocated time falls below the threshold. Monitoring and notification are disclosed as being handled by the CTM software (p 13, lines 2-5). No tangible subject matter is recited.

**Claim 6:**

Claim 6 has all the limitations of claim 3. In addition, claim 6 refers to the request component determining whether the requested lifetime is greater than the unallocated time, and if the requesting lifetime is greater than the unallocated time, presents the user with a set of options for remedying an insufficiency of the unallocated time. This limitation is disclosed in the applicant's specification as being implemented by the request component (p9, lines 13-15 and p10, lines 1-5). As discussed in claim 1, the request component is just software, so no tangible subject matter is recited.

**Claims 7 and 11:**

The steps of claim 7 and 11 are disclosed in the claims as being implemented by a processing platform. A processing platform is defined as "the underlying hardware or software for a system." Thus, the examiner asserts that claim 7 given its broadest reasonable interpretation reads on just software—an operating system.



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**Claims 8-10 and 12:**

Claims 8-10 have all the limitations of claim 7. Claim 12 has all the limitations of claim 11. In addition, as per claims 8-10 and claim 12, the examiner asserts that only additional steps performed by the software on the data being processed are recited.

Thus no statutory subject matter is recited.

**Claim 13:**

“Functional descriptive material” consists of data structures and computer programs which impart functionality when employed as a computer component. The definition of “data structure” is a “physical or logical relationship among data elements, designed to support specific data manipulation functions.” (The Authoritative Dictionary of IEEE Standards Terms, 7<sup>th</sup> Edition) “Nonfunctional descriptive material” includes but is not limited to music, literary works and compilation or mere arrangement of data.

The examiner asserts that the invention as recited in claim 13 imparts no functionality when employed as a computer component but rather is a mere arrangement of data.

**Claim 15:**

Claim 15 discloses a system with means for:

1. Allocating a pool of unallocated time, which is disclosed in the applicant's specification as handled by a purchase component 18 (p8, lines 15-19).
2. Processing a request for an assertion between a name and a public key, which is disclosed in the applicant's specification as handled by a request

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component 20 and a Certificate Authority (CA) server 28 (p9, lines 5-9 and 26-32).

3. Processing a revocation, which is disclosed in the applicant's specification as handled by a revocation component 22 (p10, lines 13-16).

As discussed in claim 1, these components are software only and no tangible subject matter is recited.

**Claim 16:**

Claim 16 has all the limitations of claim 15. In addition, claim 16 discloses a means for monitoring unallocated time and for notifying a user. As discussed in claim 5, the means for monitoring and notifying are handled by the CTM software and thus no tangible subject matter is recited.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ward et al (WO 97/30421) in view of Hsu et al (US 5,982,898).

**Claim 1:**

Ward discloses a method of providing assertions comprising the steps of:

1. Selling a pool of unallocated time (page 2, lines 15-18).

2. Upon request, generating an assertion having a lifetime and subtracting the lifetime from the unallocated time (page 4, lines 4-8).
3. Upon request, revoking an assertion and adding any remaining lifetime of the assertion to the unallocated time (page 2, lines 18-22).

Note that in Ward's invention, the assertion is some sort of indication that a car is legally parked in a metered spot.

Ward does not disclose the assertion is between a name and a public key. However, Hsu discloses an assertion between a name and a public key (col 2, lines 16-21). Hsu also discloses that a certificate authority is a commercial concern, which would mean that the certificate authority is a business which sells certificates (col 2, lines 64-66). In light of this it would have been obvious to one of ordinary skill in the art to have combined Ward's teachings of a selling methodology with Hsu's teachings of a certificate authority issuing assertions between a name and public key to arrive at the limitations recited in claim 1. One of ordinary skill would have been motivated to do so as by combining Ward's teachings with Hsu, Hsu would then be able to encourage buyers of certificates/assertions to purchase as much time as possible (to allocate to individual certificates later) with the assurance that he/she will not be wasting money on time not used (Ward, page 3, lines 5-6).

**Claim 2:**

Ward and Hsu disclose all the limitations of claim 1. In addition, Ward discloses eroding unallocated time over time (page 4, lines 4-8). Note that unallocated time being

eroded away due to it being allocated to a lifetime of the assertion is still the unallocated time being eroded away time over time.

**Claim 3:**

Ward discloses a system for managing assertions, the system comprising:

1. A repository containing an unallocated time, the unallocated time indicating an amount of time available for assertions (Fig 1, item 101).
2. A purchase component adapted to add a requested bulk lifetime to the unallocated time (p4, lines 2-3).
3. A requested component adapted to, upon generation of an assertion having a requested lifetime, deduct the requested lifetime from the unallocated time (p4, lines 4-8).
4. A revocation component adapted to, upon revocation of an assertion having a remaining lifetime, add the remaining lifetime to the unallocated time (p2, lines 18-22).

Ward does not disclose the assertion is between a name and a public key.

However, Hsu discloses an assertion between a name and a public key (col 2, lines 16-21). Hsu also discloses that a certificate authority is a commercial concern, which would mean that the certificate authority is a business which sells certificates (col 2, lines 64-66). In light of this it would have been obvious to one of ordinary skill in the art to have combined Ward's teachings of a selling methodology with Hsu's teachings of a certificate authority issuing assertions between a name and public key to arrive at the

limitations recited in claim 3. One of ordinary skill would have been motivated to do so for the same reason given in claim 1.

**Claim 4:**

The limitation recited in claim 4 is obvious to the combination invention of Ward and Hsu. Hsu discloses each assertion is a public key certificate (col 2, lines 12-32).

**Claim 5:**

Ward further discloses monitoring when the unallocated time falls below a threshold and notifying a user associated with the unallocated time if the unallocated time falls below the threshold (p4, lines 17-26 and Figure 2, step 265 and 267).

**Claim 6:**

Ward further discloses wherein the request component determines whether the requested lifetime is greater than the unallocated time, and if the requested lifetime is greater than the unallocated time, present the user with a set of options for remedying the insufficiency of the unallocated time (p4, lines 17-26 and Fig 2).

**Claim 7:**

Ward discloses processing platform implemented method of processing a request for an assertion, the method comprising the steps of:

1. Maintaining an unallocated time the unallocated time being available for assertions (page 2, lines 15-18).
2. Accepting a request for an assertion and a requested lifetime (page 4, lines 4-8).
3. Determining whether the unallocated time is greater than or equal to the requested lifetime (p4, lines 17-26 and Fig 2).

4. Upon determining that the unallocated time is greater than or equal to the requested lifetime, deducting the requested lifetime from the unallocated time (Fig 2).

Ward does not disclose the assertion is between a name and a public key. However, Hsu discloses an assertion between a name and a public key (col 2, lines 16-21). Hsu also discloses that a certificate authority is a commercial concern, which would mean that the certificate authority is a business which sells certificates (col 2, lines 64-66). In light of this it would have been obvious to one of ordinary skill in the art to have combined Ward's teachings of a selling methodology with Hsu's teachings of a certificate authority issuing assertions between a name and public key to arrive at the limitations recited in claim 7. One of ordinary skill would have been motivated to do so for the same reason given in claim 1.

**Claim 8:**

The limitation recited in claim 8 is obvious to the combination invention of Ward and Hsu. Hsu discloses forwarding the request for an assertion to an entity responsible for generating assertions (col 2, lines 58-66).

**Claim 9:**

The limitation recited in claim 9 is obvious to the combination invention of Ward and Hsu. Hsu discloses each assertion is a public key certificate (col 2, lines 12-32).

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**Claim 10:**

Ward and Hsu disclose all the limitations of claim 7. In addition, Ward discloses eroding unallocated time over time (page 4, lines 4-8). Note that unallocated time being eroded away due to it being allocated to a lifetime of the assertion is still the unallocated time being eroded away time over time.

**Claim 11:**

Ward discloses a processing platform implemented method of processing a request for a revocation of an assertion, the method comprising the steps of:

1. Maintaining an unallocated time, the unallocated time being time available for assertions (page 2, lines 15-18).
2. Identifying an assertion to be revoked, the assertion having a remaining lifetime (Fig 2).
3. Adding the remaining lifetime to the unallocated time (Fig 2).

Ward does not disclose the assertion is between a name and a public key. However, Hsu discloses an assertion between a name and a public key (col 2, lines 16-21). Hsu also discloses that a certificate authority is a commercial concern, which would mean that the certificate authority is a business which sells certificates (col 2, lines 64-66). In light of this it would have been obvious to one of ordinary skill in the art to have combined Ward's teachings of a selling methodology with Hsu's teachings of a certificate authority issuing assertions between a name and public key to arrive at the

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limitations recited in claim 11. One of ordinary skill would have been motivated to do so for the same reason given in claim 1.

**Claim 12:**

The limitation recited in claim 12 is obvious to the combination invention of Ward and Hsu. Hsu discloses each assertion is a public key certificate (col 2, lines 12-32).

**Claim 13:**

Ward discloses a memory for storing data for access by an application program being executed on a data processing system, comprising:

1. A data structure stored in the memory, the data structure including information resident in a database used by the application program including at least one entry, each entry including:
  - a. An account identification field which identifies an account (Fig 2 and p4, lines 17-26).
  - b. An unallocated time field which identifies an amount of time available to the account for allocation to assertions.

Ward does not disclose a user identification field which provides access control to the account and an assertion being between a name and a public key. However, Hsu discloses a user identification field which provides access control to the account and an assertion between a name and a public key (col 2, lines 16-21). Hsu also discloses that a certificate authority is a commercial concern, which would mean that the certificate authority is a business which sells certificates (col 2, lines 64-66). In light of this it would



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have been obvious to one of ordinary skill in the art to have combined Ward's teachings of a selling methodology with Hsu's teachings of a certificate authority issuing assertions between a name and public key to arrive at the limitations recited in claim 13. One of ordinary skill would have been motivated to do so for the same reason given in claim 1.

**Claim 14:**

Ward discloses:

1. Generating an entry in a repository, the entry including unallocated time (Fig 1, item 101 and page 3, last paragraph-page 4, first paragraph).
2. Receiving a request for a purchase of bulk lifetime (page 2, lines 15-18 and page 3, last paragraph-page 4, first paragraph).
3. Adding the bulk lifetime to the unallocated time, in the even that a request for a purchase of bulk lifetime is received (p4, first paragraph).
4. Receiving a request for an assertion and a requested lifetime (page 4, lines 4-8 and Fig 2).
5. Deducting the requested lifetime from the unallocated time, in the event that a request for an assertion is received (page 4, lines 4-8 and Fig 2).
6. Receiving an identification of an assertion to be revoked, the assertion having a remaining lifetime (Fig 2).
7. Adding the remaining lifetime to the unallocated time, in the event that an identification of an assertion to be revoked is received (Fig 2).

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Ward does not disclose the assertion is between a name and a public key.

However, Hsu discloses an assertion between a name and a public key (col 2, lines 16-21). Hsu also discloses that a certificate authority is a commercial concern, which would mean that the certificate authority is a business which sells certificates (col 2, lines 64-66). In light of this it would have been obvious to one of ordinary skill in the art to have combined Ward's teachings of a selling methodology with Hsu's teachings of a certificate authority issuing assertions between a name and public key to arrive at the limitations recited in claim 14. One of ordinary skill would have been motivated to do so for the same reason given in claim 1.

**Claim 15:**

Ward discloses a system for allocating assertions comprising:

1. Means for allocating a pool of unallocated time available for assertion validity (page 2, lines 15-18).
2. Means for processing a request for an assertion having a lifetime, the means for processing the request subtracting the lifetime from the unallocated time (page 4, lines 4-8).
3. Means for processing a revocation of an existing assertion by determining any remaining lifetime of the existing assertion and adding at least a portion of the remaining lifetime of the assertion to the unallocated time (page 2, lines 18-22).

Ward does not disclose the assertion is between a name and a public key.

However, Hsu discloses an assertion between a name and a public key (col 2, lines 16-

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21). Hsu also discloses that a certificate authority is a commercial concern, which would mean that the certificate authority is a business which sells certificates (col 2, lines 64-66). In light of this it would have been obvious to one of ordinary skill in the art to have combined Ward's teachings of a selling methodology with Hsu's teachings of a certificate authority issuing assertions between a name and public key to arrive at the limitations recited in claim 15. One of ordinary skill would have been motivated to do so for the same reason given in claim 1.

**Claim 16:**

Ward discloses all the limitations of claim 15. In addition, Ward further discloses means for monitor when the unallocated time falls below a threshold, and for notifying a user associated with the unallocated time if the unallocated time falls below the threshold (Figure 3, step 265 and 267).

**Claims 17-21:**

Claims 17-21 recites a computer readable medium having instructions stored therein for executing on a processing platform to execute the method of claims 1, 2, 7, 9, and 10 respectively. This limitation is obvious to the combination invention of Ward and Hsu as there must be a computer readable medium having instructions stored thereon for executing on a processing platform to execute the methods as recited in the aforementioned claims as Hsu's invention is computer implemented (Fig 1).

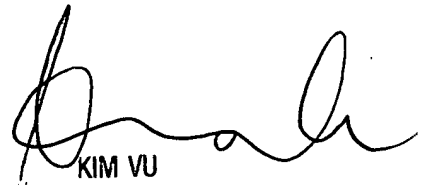
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ponnoreay Pich whose telephone number is 571-272-7962. The examiner can normally be reached on 8:00am-4:30pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PP

  
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SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100